

VHUE 1 ATGACACCGACGACGACGCCGGAACTCAG 59
 VHUE 54 ACGGAGTTGACTACGACGATGAAGCGACTCCC 68
 VHUE 59 TGTGTCCTCACCGACGTGCTTAATCAGTCGAAG 73
 VHUE 100 CCAGTCACGTTGTTCTGTACGGCGTTGTCTTT 102
 VHUE 133 CTCTTCGGTTCCATCGGCAACTTCTTGGTGATC 106
 VHUE 166 TTCAACCACACCTGGCGACGTGGATTCAATGT 110
 VHUE 199 TCCGGCGATGTTACTTTATCAACCTCGCGGCC 201
 VHUE 232 GCCGATTGCTTTCGTTGTACACTACCTCTG 204
 VHUE 265 TGGATGCAATACCTCCTAGATCACAACTCCCTA 207
 VHUE 298 GCCAGCGTGCCGTACGTTACTCACTGCCGT 300
 VHUE 331 TTCTACGTGGCTATGTTGCCAGTTGTGTTT 303
 VHUE 364 ATCACGGAGATTGCACTCGATCGCTACTACGCT 306
 VHUE 397 ATTGTTACATGAGATATCGGCCTGTAAAAACAG 400
 VHUE 430 GCCTGCCCTTTCAGTATTTTGGATCTTT 402
 VHUE 463 GCCGTGATCATGCCATTCCACACTTATGGTG 405
 VHUE 496 GTGACCAAAAAAGACAATCAATGTATGACCGAC 500
 VHUE 529 TACGACTACTTAGAGGTAGTTACCCGATCATC 501
 VHUE 562 CTCAACGTAGAACCTCATGCTCGGTGCTTCGTG 504
 VHUE 595 ATCCCCGTCAGTGTATCAGCTACTGCTACTAC 507
 VHUE 628 CGCATTCCAGAACATGTTGCCGTTCTCAGTCG 508
 VHUE 661 CGCCACAAAAGGCCGCATTGTACGGGTACTTATA 509
 VHUE 694 GCGGTGCTGCTTGTCTTATCATCTTTGGCTG 520
 VHUE 727 CCGTACCAACCTGACGCTGTTGTGGACACGTTG 520
 VHUE 760 AAAACTGCTAAATGGATCTCCAGCAGCTGCGAG 522
 VHUE 793 TTGAAAAATCACTCAAGCGCGCTCATCTTG 525
 VHUE 826 ACCGAGTCACTCGCCTTGTACTGTTGTCTC 528
 VHUE 859 AATCCGCTGCTGTACGTCTCGTGGGCACCAAG 531
 VHUE 892 TTTCGGCAAGAACGTGACTGTCTGCTGGCCGAG 534
 VHUE 895 TTTCGCCAGCGACTGTTTCCCGCATGTATCC 537
 VHUE 928 TGGTACCAACAGCATGAGCTTTCGCGTCGGAGC 539
 VHUE 961 TCGCCGAGCCGAAGAGAGACGTCTCCGACACG 543
 VHUE 1004 CTGTCCGACGAGGCCTGTCGCGTCTCACAAATT 546
 VHUE 1037 ATACCGTAA

1066

Fig. 1A

VHL/E 1 MTPTTTAAELTEFDYDDEATPCVLTDVLNOSK 33
VHL/E 34 PVTFLYGVVFVFGSIGNFLVIFTITWRRRIQC 66
VHL/E 67 SGD VYF INLAADLLFVCTLPLWMQYLLDHNSL 88
VHL/E 100 ASVPCTLLTACFYVAMFAASLCFITEIALDRYYA 132
VHL/E 133 IVYMAYRPVKOACLFSIFWWIFAVIIIAIPHFMV 165
VHL/E 166 VTKKDNCMTDYDYLEVSYPIILNVELMLGAFV 188
VHL/E 199 IPLSVISYCYYRISRIVAVSQSRHKGRIVRVL 231
VHL/E 232 AVVLVFIIIFWL PYH LTL FVDTLKLLKWISSSCE 264
VHL/E 265 FEKSLKRALILTESLAFCHCCLNPLL YVFVGTK 297
VHL/E 298 FROELHCLLAEFRQLFSADVSWYHSMSFSRRS 330
VHL/E 331 SPSRRETSSDTLSDEACRVSQIIP 354

Fig. 1B

human US28	1	M I P T T	5
rhesus US28.1	1	M	1
rhesus US28.2	1	M T N A	4
rhesus US28.3	1	M T N I	4
rhesus US28.4	1		0
rhesus US28.5	1	M I I I I M S A T T N S S T T P Q A S S T T M T T K T S T P G N	32
human US28	6	T T A E I L T T	12
rhesus US28.1	2		1
rhesus US28.2	5		4
rhesus US28.3	5		4
rhesus US28.4	1		0
rhesus US28.5	3	T T T G I T T S T L T T I S T T S N A T S I T S N L S T T G N Q T	64
human US28	13		12
rhesus US28.1	2		4
rhesus US28.2	5		8
rhesus US28.3	5		6
rhesus US28.4	1		7
rhesus US28.5	5	N S S Q H N I S V E L S I G A	15
		A T T N A T T F S S T L T T S T N I S S T F S T V S T V A S N A	98
human US28	13		12
rhesus US28.1	5	S C N	8
rhesus US28.2	7	- C H	9
rhesus US28.3	8	- T C H	11
rhesus US28.4	6		21
rhesus US28.5	7	G P V I T G	128
		T C N S T I T T N I T T A F T T A A N T T A S S L T S I V T S L	
human US28	13	F R D Y D E D A T P C V F T D V L N Q S K P V T L	37
rhesus US28.1	9	N V T L N A S A	23
rhesus US28.2	10	- N E S L A S Y G	24
rhesus US28.3	2	- N G T F E T F K	26
rhesus US28.4	22		21
rhesus US28.5	9	A T T I E T T S F D Y D E S A E A C N I T D I V H T T R S V T V	160
human US28	38	F L Y G V V V F L E G S I G N E	68
rhesus US28.	124	A M Y S A V I C G L L V G N E	54
rhesus US28.	25	T L Y S I A G I N C G V T G N I	55
rhesus US28.	37	S A Y T V E V I V I G I L G N I	57
rhesus US28.	42	- Y T C V F L I F G I L G H F Y	51
rhesus US28.	51	T F Y T I I F T G I L G I N E	191
		L V M E T I T W B R R I O C S G	
		P S R Y I A I	
		I A P A A T I	
		I T R P V A I	
human US28	69	D V Y F I N L A A D I S U F V C T L P L W M Q Y L L D H N S L A	100
rhesus US28.	155	D V Y F F H A S M A D L V S I T V M L P L W L H Y V L N F A Q L S	86
rhesus US28.	26	D I Y Y L N M I F T D F L V H I P L P A W V Y Y L L N Y T Q L S	87
rhesus US28.	36	D I Y F F N A S L A D I F A A C M L P A W V N Y A L D I S T Q L S	89
rhesus US28.	42	D V L F R H L M I T E E V F T L T I P V W A Y H L T T H G N L P	83
rhesus US28.	52	E I Y F V N L A I S D L M F V C T L P F W I M Y L L E H D V M S	223
human US28	101	S V P C T L L T A C F Y M A M E A S L C F I T E I A L D R Y Y A	132
rhesus US28.	187	R G A C I S F S V T F Y V P L F V Q A W L E N S I A M E R - Y S	117
rhesus US28.	286	H Y A C I A D S F V F V S I F I Q A D F M V A V A I E R - Y R	118
rhesus US28.	300	K F S C I T F T F G F Y V S L F I Q A W M L I V T L E R - Y G	120
rhesus US28.	484	G S W C B R S L T F V F M U T V F A R A F F Y T L L I W D R - Y S	114
rhesus US28.	524	H A S C V A M T A I F Y C A L F A S T V F I S S I V L D R C Y A	256

FIG. 2 (Page 1 of 2)

human US28 133	I V Y M R Y R R V K Q - - - - -	A G E P S I F W W I F A V E	157
rhesus US28.118	N L V W M A P I S V K - - - - -	T A F K H C I G T - - - - -	143
rhesus US28.29	S L V K N K P L S V K - - - - -	K A S V S C A C I - - - - -	144
rhesus US28.381	S L V W I I A P I T R N - - - - -	K A I A N C V L F - - - - -	145
rhesus US28.416	V I I C R H P I P V N L N Y S Q V I G I - - - - -	H S V W - - - - -	141
rhesus US28.286	V I I L G I T E K A N R R L L R N A V S G C M I M - - - - -	W G I C F T - - - - -	284
human US28 158	E A I P H F M V V T K - - - - -	M T D Y D Y - - - - -	186
rhesus US28.144	V A I S P Y Y I A Y R N S E E H E C I - - - - -	L E V S Y P I	175
rhesus US28.285	W S S P Y Y M F R I S O H E T N S I C I - - - - -	I L G N Y I T M H M N S P F R T	176
rhesus US28.317	L A A P Y Y S F R N E E H O C I - - - - -	I L G N Y I T M H M N S P F R T	178
rhesus US28.442	E S A S P F I S I F N G - - - - -	I M B N Y I T W S V G E T W H I	178
rhesus US28.285	H A L P H F I F M K K - - - - -	I L G N M G - S I P S E S S A	170
human US28 187	I L N V E L M L G A F V I P E S V I S Y C Y Y R I S R I V A V S	V A E Y E P G I N N F Y V I	314
rhesus US28.178	C M D V V I V A W E F L A P V E V T I E A S V K M - R R E E W G	218	
rhesus US28.277	T M D A S I N I W S F V V P A V T I E L L I A R R I Y Y - C T S G	208	
rhesus US28.879	A L D F I T T E L E M P V A T I E L A L S E K I M A R W S T F G	207	
rhesus US28.471	V L N L E V H I L C S F W L P L U I M S A N C Y Y Q A K R R A S P D	210	
rhesus US28.515	F I N T E V N L I C T V L P A A A I I Y W Y I K I T K A L K T H	202	
human US28 219	Q S - R H K G R I V R V I L V A S V E E F E W L P Y H L T L F	346	
rhesus US28.207	N T - R H N E E K N S D I D I V V A M T I V F F W G P F N P V V V	249	
rhesus US28.208	N K - K M N A R A S G I L L F A M V I S M F E E G G I F N L N I F	237	
rhesus US28.211	Y R - N I T S R T S L I E E C H E T V A A G F W G P F H L F M F	238	
rhesus US28.203	O - I H E L Y R C S I L E F F I T T Y I A I V W F P F H L A L E	241	
rhesus US28.547	E E E R H A I T S L N I V L A V V A T F W I P Y N L M M	232	
human US28 250	V D I L K I I - L K W I S S S C E F E R S I K R A L I L T E S A	378	
rhesus US28.234	F D N I L O R Y Y D T I - T N C D V E K I K H I M A I S E A I V	280	
rhesus US28.239	R D - I V S D T S E D N K D C T Y L K O E H F I B M V G V A L V	268	
rhesus US28.242	I E N V A G Q I Y H I O Q K D C W Y L O L R R H L C S L M T E T L V	269	
rhesus US28.233	D P A E I S - I S H V E P S S A I H W A - S I V V T C K S F T	273	
rhesus US28.579	M Y S I V H - M Q - I P W E C I S S E K I L R A S I I I T E S A	261	
human US28 281	F C H C C L N P L L Y M F V G T K F R Q E L H C L L A E F R Q R	408	
rhesus US28.269	Y F R G I T A P I I Y V G I S G R E R E I I Y S L F R R O E Y N	312	
rhesus US28.270	Y I G R A I F N P F M Y M C V S T R I L R C E I K C L F M R I P Y E	300	
rhesus US28.274	F L R S V F N P Y I Y M I I S Y K H R Q O V R A S L L K R T Q Y D	301	
rhesus US28.162	F V Y A G I S P L V Y F T C C P T V R R E L L M S L R P F F T	305	
rhesus US28.539	L S H C C I N P I I Y I F G P R C A S E F C H L I R C C F T R	292	
human US28 313	I F S R D V S W - - Y H I S M S F S R A I S S P S I R R E I S S D T L	440	
rhesus US28.301	D I L D P D A N - - - - - Q F M I E L T I S O G R I S S N R R A B O S	342	
rhesus US28.292	T L D A E H A - - - - - K I M V I N L K N R N I A N V P D P I K - - -	327	
rhesus US28.304	A I D T T C I - - - - - A E T M O L K A K G V P V S D P A - - -	325	
rhesus US28.383	W I S S K I H R G Y A P L K T I O P L N I P D E P T	329	
rhesus US28.541	I C P H R I S W S S I R A E T V S I S L S H S Q V S A S S E D	317	
human US28 343	S D E V C R V S O I I P	471	
rhesus US28.328	E S N V I P O P E E I C F W	483	
rhesus US28.228	- - - P R E E Y E S V L	354	
rhesus US28.380	- - - P H D C E I C F L	339	
rhesus US28.418	D N K S P H I L L N - - E	333	
rhesus US28.672	D N D V H D E L L O F I I	337	
		327	
		483	

FIG. 2 (Page 2 of 2)

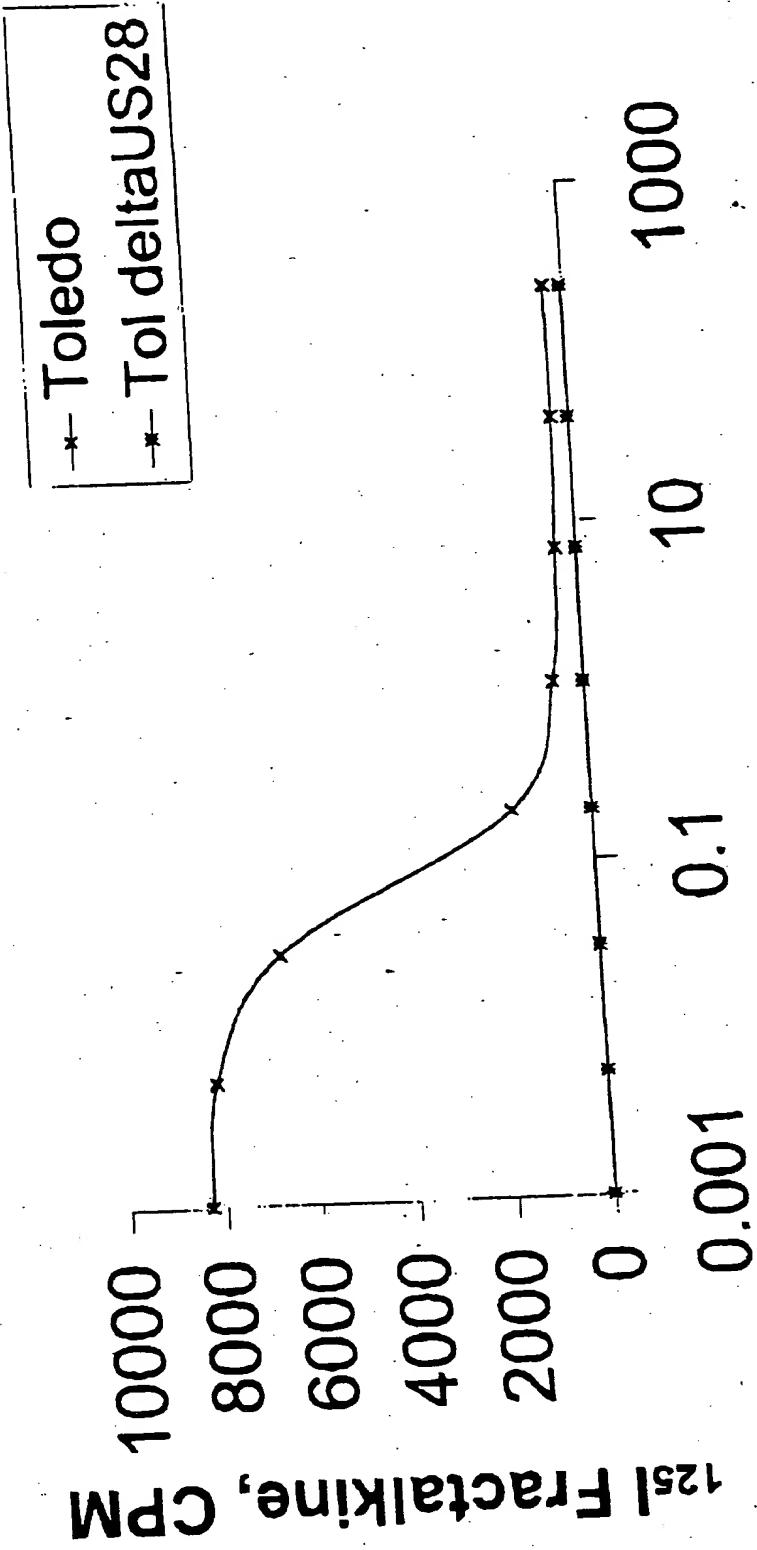
human UL78	1	M S P S V E E T T S V T E S I M [E A] V S F K H M G P F E G Y	31
rhesus UL78	1	- - - - -	0
human UL78	32	S [M] S A D R A A S D I L L I G M F G S V S L V N [N] E T E I G C [I]	62
rhesus UL78	1	[M] I T E R V L A G E I L A G M T A A G S E V R E E A V V - M	28
human UL78	63	W V L R V T R P - - P V S S V M I F T W N L V L S Q F F S I L A	91
rhesus UL78	29	W L N M L D R A G M P M A V G H Y T G N L V L T Q V I C I F S	59
human UL78	92	[T] M L S K G I M L R G A L N L S L C R E V L F V D D V G L Y S	122
rhesus UL78	60	[M] L A S K I V G M T S A A N M G F C G I M A V F L E D T G L Y	89
human UL78	123	T A L F E S E F L I L D R L S A I S Y G R D I W H H E - T R E N	152
rhesus UL78	90	V T S E L F M R M I L D R M A A F L N G R L F W R Q G E T K O	120
human UL78	153	A G V A I S Y A V A F A W V A L S I V A V A V P T A A T G S L D Y R	183
rhesus UL78	121	N L S T S V Y [S] E R C W V L G M A A A V P S A A V A A P N S	151
human UL78	184	W L G C Q I P I Q Y A A V D L T I K M W F L L G A P M I F A V A E	214
rhesus UL78	152	E W E R C E I P V S Y A A I D M I V K I E W F V L I C A P V V E E	182
human UL78	215	A N V V E L A Y S D I R D H V W S Y V G R V C T F Y V T G E M	245
rhesus UL78	183	M A V I I Q S S Y H E E R I W Y Y A R R V F M F Y T A C E	213
human UL78	246	[E] F V P Y Y C F R V - - - - L R G V - L Q P A S A A G T G	269
rhesus UL78	214	V M M V P Y Y F V R V M L S D F A L V D I K T K T A N S D G C	244
human UL78	270	F G I M D Y V E L A T R T I L L T M R L G I D P E E T H A F F S	300
rhesus UL78	245	D S T F L D Y L N M F T H V I Y S F K L V V T A E E V M I E C	275
human UL78	301	R E E T K D L D D S F D Y L V E R C O Q S C H G H F V R R L V	331
rhesus UL78	276	S I N P M E T L E E C L E R A D A E R Q S H S E A S Q G E R R	306
human UL78	332	Q A L K R A M Y S V E L A V C Y F S T S V R D V A E A V K K S	362
rhesus UL78	307	L P I N T C C I K L I E L I K Q Y V S T L S K A E D I N S G I E	337
human UL78	363	S S R C Y A D A T S A A V V V T T T T S E K A T L V E H A E G	393
rhesus UL78	338	R A N L P E N A E D I G T T G S D Q L P T E V T V T P N S S A	368
human UL78	394	M A S E M C P G T T I D V S A E S S S V L C T D G E N T V A S	424
rhesus UL78	369	V F S T G G T V S P V	379
human UL78	425	D A T V T A L	431

FIG. 3

HUL33	1	M	
HUL33splice	1	M	O T I I H N S
RHUL33	1	M	A V T L R G G S P I N F K L M I V S H E I R L F Q
RHUL33splice	1	M	
HUL33	10	M	E R E N Y P P
HUL33splice	10	M	
RHUL33	2	M	R S A I R P G G I W K P F F T T E R T N S I L H I N T T C N V
RHUL33splice	2	M	
HUL33	2	T	G P L F A I R T T E A V L N S P R I E V G G P I N A V V
HUL33splice	24	T	G P L F A I R T T E A V I N T E R T V G G P I N A V V
RHUL33	2	T	D O S I Y A A K L G E A I V N S A L A I F G T P I N A E V V
RHUL33splice	2	T	
HUL33	24	T	O L I T N R V L G Y S T P T I Y M T N L Y S T N F L T E T V I
HUL33splice	25	T	O L I T N R V L G Y S T P T I Y M T N L Y S T N F L T E T V I
RHUL33	25	T	O L I A N R V H G Y S T P T I Y M T N I Y S A N F L T E T V I
RHUL33splice	27	T	
HUL33	66	M	E I V L S N O W L L P A G V A S C K F I S V I I Y S S C T V G
HUL33splice	66	M	
RHUL33	17	M	E I V L S N O W L L P A G V A S C K F I S V I I Y S S C S T V G
RHUL33splice	17	M	
HUL33	66	A	T V A N H A A D R Y R V L H K P R E M A R O S S M R S T Y M I
HUL33splice	66	A	
RHUL33	66	A	A T V A N H A A D R Y R V L H K P R E M A R O S S M R S T Y M I
RHUL33splice	66	A	
HUL33	12	A	A T V A N H A A D R Y R V L H R P R E M A R O S S M R S T Y M I
HUL33splice	12	A	
RHUL33	12	A	A T V A N H A A D R Y R V L H R P R E M A R O S S M R S T Y M I
RHUL33splice	12	A	
HUL33	12	A	E T W L A G E I L F S V P A A V Y T T V V M H H D A M D T I N A N
HUL33splice	12	A	
RHUL33	81	A	E T W L A G E I L F S V P A A V Y T T V V M H H D A M D T I N A N
RHUL33splice	81	A	
HUL33	12	G	G H A T C V I E X F V A E E V H T V L L S W K V L L I M V W G A
HUL33splice	12	G	
RHUL33	111	G	G H A T C V I E X F V A E E V H T V L L S W K V L L I M V W G A
RHUL33splice	111	G	
HUL33	111	G	B H M T C I M H F A Y D E V V - V L M V W K I T E N E V W G A
HUL33splice	111	G	
RHUL33	111	G	B H M T C I M H F A Y D E V V - V L M V W K I T E N E V W G A
RHUL33splice	111	G	
HUL33	12	P	P V I M M I T W F Y A F F Y S T V O R T S P K E R T L T F V S
HUL33splice	12	P	
RHUL33	12	P	P V I M M I T W F Y A F F Y S T V O R T S P K E R T L T F V S
RHUL33splice	12	P	
HUL33	226	P	P V I M M I T W F Y A F F Y S T V O R T S P K E R T L T F V S
HUL33splice	226	P	
RHUL33	179	P	P V I M M I T W F Y A F F Y S T V O R T S P K E R T L T F V S
RHUL33splice	179	P	
HUL33	226	H	H L T L R R T I G T L A R V V P H L H C L I N P I Y A L L G H
HUL33splice	226	H	
RHUL33	226	H	H L T L R R T I G T L A R V V P H L H C L I N P I Y A L L G H
RHUL33splice	226	H	
HUL33	217	D	D L T L R R V I N T F S R L V P N L H C M V N P I Y A L M G N
HUL33splice	217	D	
RHUL33	217	D	D L T L R R V I N T F S R L V P N L H C M V N P I Y A L M G N
RHUL33splice	217	D	
HUL33	220	D	D F L Q R M R Q C F R G Q O L L D R R A F L R S D N R A T A
HUL33splice	220	D	
RHUL33	227	D	D F V S K V G O C F R G E I T I N R R T F L R S M G D A R N S D
RHUL33splice	227	D	
HUL33	227	D	D F V S K V G O C F R G E I T I N R R T F L R S M G D A R N S D
HUL33splice	227	D	
HUL33	322	T	T N L A A G N N S O S V A T S L O Y N S K Y A N G M E K R S V
HUL33splice	322	T	
RHUL33	229	V	V P T I V S Q Q P I A T P I V N K P E S I N P H V K R G Y
RHUL33splice	229	V	
HUL33	324	F	F N F P S G T W K G G O K T A S N D T S T K I P H R L S O S H
HUL33splice	324	F	
RHUL33	226	F	F S V S A S S E L I A A A K K A K D K S I . . . K R L S M S H O
RHUL33splice	226	F	
HUL33	326	N	S V S A S S E L I A A A K K A K D K S I . . . K R L S M S H O
HUL33splice	326	N	
RHUL33	227	N	N L R L T
RHUL33splice	227	N	
HUL33	327	N	N L S G V
HUL33splice	327	N	
RHUL33	228	N	N L R L T
RHUL33splice	228	N	
HUL33	328	N	N L R L T
HUL33splice	328	N	

FIG. 4

Binding of Fractalkine to HCMV
Virions



Cold Fractalkine (nM)

FIG. 5

**Fractalkine Homologous Competition
on Rh-CMV Infected Fibroblasts**

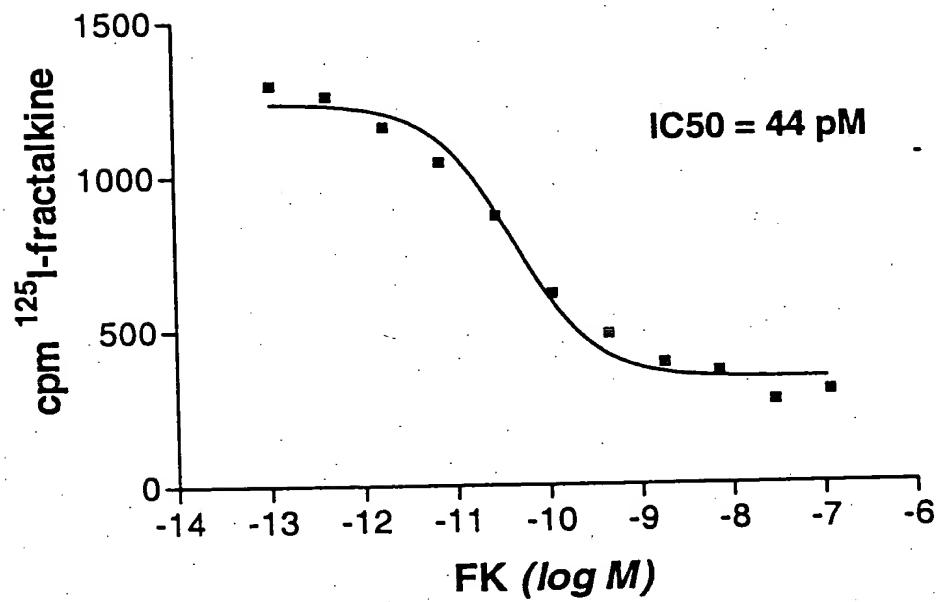


FIG. 6

Sucrose Virions/CX3C binding

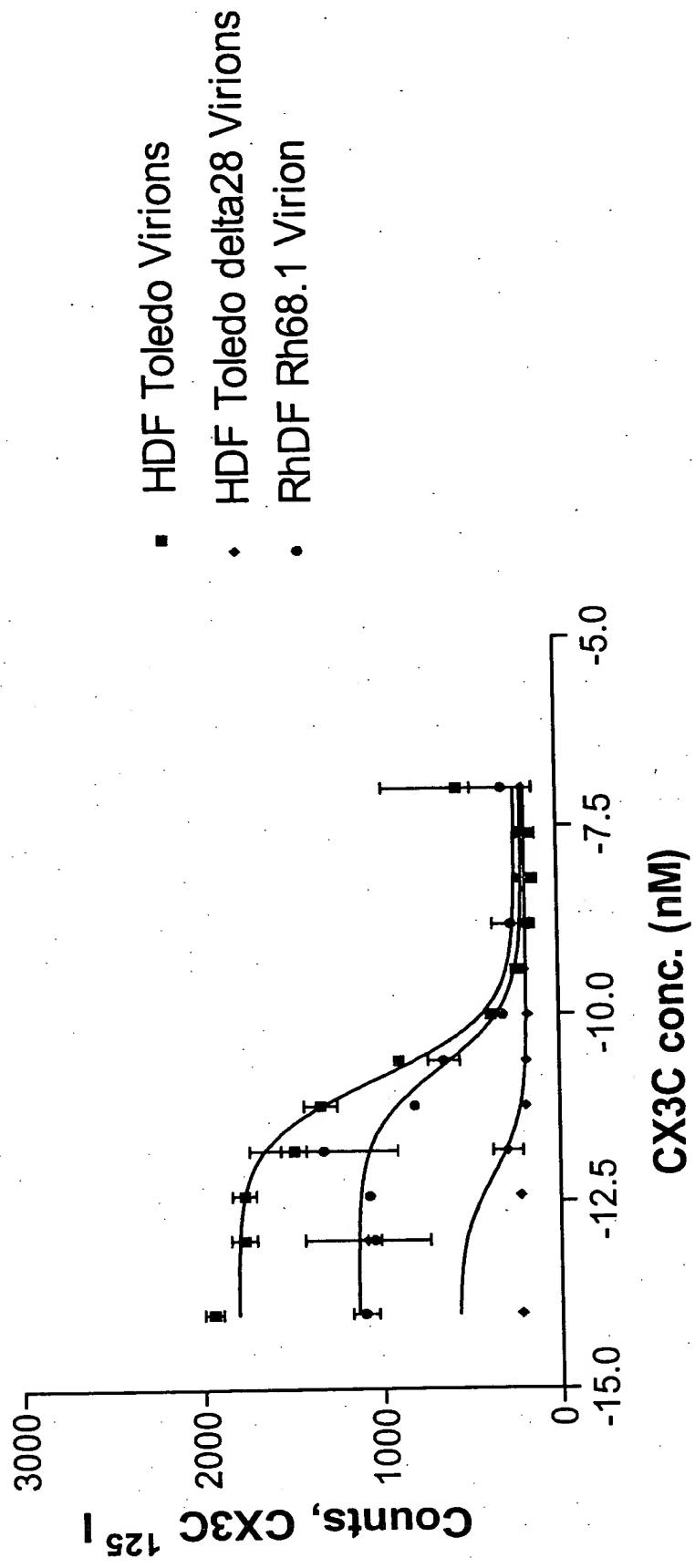


FIG. 7